10/533,950

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	64	pyrrole NEAR3 functionaliz$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/07 09:07
L2	12	l1 and (maleimide or succinimide)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/07 09:07
S1	167	polymer$1 same (pyrrole$1based or pyrrole adj based or pyrrole adj containing)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/07 09:06
S2	3	"8911649"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 16:52
S3	186	($4sensor or biochip$1) same pyrrole	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 16:54
S4	162	S3 and polymer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 16:54
S5	38	S4 and (pyrrole NEAR2 polymer)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 16:57
S6	0	NHS$1pyrrole or maleimide$1pyrrole	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 16:58

S7	2	NHS NEAR pyrrole or maleimide NEAR pyrrole	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 16:59
S8	2	(NHS NEAR pyrrole) or (maleimide NEAR pyrrole)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 16:59
S9	49	pyrrole NEAR3 (maleimide or NHS or succinimide)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 17:01
S10	35	S9 and polymer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 17:03
S11	5467	array$1 NEAR (DNA peptide)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 17:04
S12	6	S11 same (polypyrrole or pyrrole adj polymer or pyrrole$1based or pyrrole adj containing)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 17:26
S13	7976	polypyrrole	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 17:27
S14	8	polypyrrole same (biosensorS1 or biochip$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 17:29

S15	1	(pyrrole adj polymer) same (biosensorS1 or biochip$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 17:30
S16	1	(pyrrole$1based or pyrrole adj containing) same (biosensorS1 or biochip$1)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/05 17:32

FULL ESTIMATED COST 161.33 161.54

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FILE COVERS 1907 - 7 Dec 2005 VOL 143 ISS 24
FILE LAST UPDATED: 6 Dec 2005 (20051206/ED)

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They are available for your review at:

http://www.cas.org/infopolicy.html

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=> s l3
L4        1035 L3

=> s l4 and pyrrole
         32818 PYRROLE
          6000 PYRROLES
         34422 PYRROLE
                (PYRROLE OR PYRROLES)
L5          11 L4 AND PYRROLE

=> d l5 ibib abs hitstr tot
```

L5 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:558654 CAPLUS
DOCUMENT NUMBER: 142:246001
TITLE: Development of a spectroscopic assay for bifunctional ligand-protein conjugates based on copper
AUTHOR(S): Brady, Erik D.; Chong, Hyun-Soon; Milenic, Diane E.; Brechbiel, Martin W.
CORPORATE SOURCE: Radioimmune and Inorganic Chemistry Section, Radiation Oncology Branch, National Cancer Institute, NIH, Bethesda, MD, 20892, USA
SOURCE: Nuclear Medicine and Biology (2004), 31(6), 795-802
CODEN: NMBIEO; ISSN: 0969-8051
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A simple, non-radioactive method for the determination of ligand-to-protein ratio (L/P) for novel ligand-antibody conjugates has been developed based on an exchange equilibrium with the purple Cu(II) complex of arsenazo III. The method requires a UV/Vis spectrometer and has been verified for monoclonal antibody Herceptin conjugates of a variety of ligand modalities, including common macrocyclic compds., NOTA and TETA, and with a new bifunctional tachpyridine (1H-**Pyrrole**-1-butanamide,N-[4-[[(1α,3α,5α)-3,5-bis[(2-pyridinylmethyl)amino]cyclohexyl](2-pyridinylmethyl)amino]butyl]-2,5-dihydro-2,5-dioxo-(9CI)). The

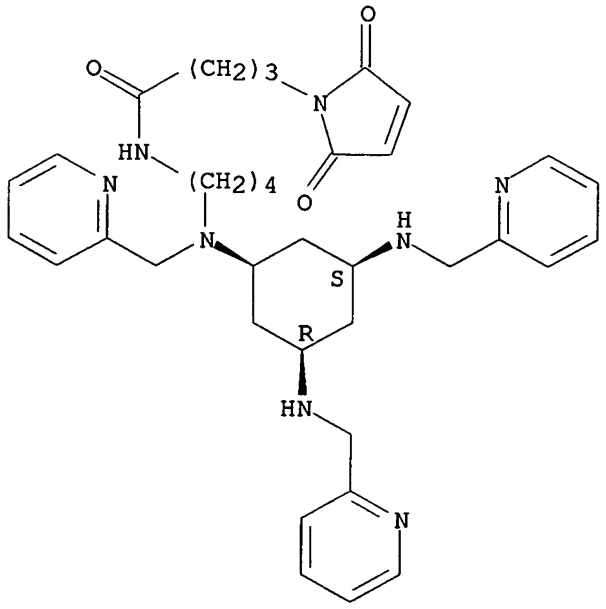
spectroscopically derived values for L/P were verified by titration of the ligand-antibody conjugate with 64Cu. In each case, the value obtained by UV/Vis spectroscopy matches that found by radiolabeling. The method is rapid, taking less than 30 min with each ligand in this study.

IT **479251-97-3DP**, conjugates with Herceptin
RL: ANT (Analyte); SPN (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(development of a spectroscopic assay for bifunctional ligand-herceptin conjugates based on an copper arsenazo complex)

RN 479251-97-3 CAPLUS

CN 1H-Pyrrole-1-butanamide, N-[4-[[(1α,3α,5α)-3,5-bis[(2-pyridinylmethyl)amino]cyclohexyl](2-pyridinylmethyl)amino]butyl]-2,5-dihydro-2,5-dioxo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:432770 CAPLUS
DOCUMENT NUMBER: 140:402833
TITLE: Method for immobilizing a protein on a **pyrrole**-based polymer and its use for manufacture of a sensor
INVENTOR(S): Roget, Andre; Livache, Thierry; Levy, Yves
PATENT ASSIGNEE(S): Commissariat A L'energie Atomique, Fr.
SOURCE: Fr. Demande, 50 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2847581	A1	20040528	FR 2002-14580	20021121
WO 2004048972	A1	20040610	WO 2003-FR50127	20031120

W: JP, US
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

IT, LU, MC, NL, PT, RO, SE, SI, SK, TR

EP 1563304 A1 20050817 EP 2003-786063 20031120

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK

PRIORITY APPLN. INFO.: FR 2002-14580 A 20021121

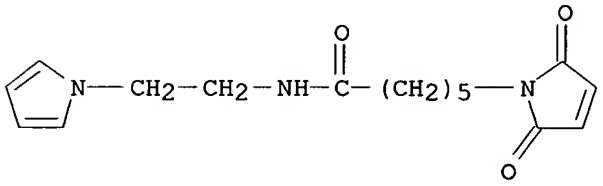
WO 2003-FR50127 W 20031120

AB An invention involving a procedure for protein fixation on a **pyrrole**-based conducting polymer, usable in particular for the manufacture of a sensor or a multisensor. The procedure involves three steps: (1) coupling of protein to a **pyrrole** monomer to obtain the first solution, (2) preparation of a second solution of **pyrrole** not containing a protein, (3) mixture of the first solution with the second solution to obtain the electropolymn. solution, (4) electropolymn. of the **pyrrole** with the protein-**pyrrole** monomer. The proteins used may include enzymes, antibodies, antigens, hormones or membrane receptors.

IT **690256-33-8DP**, polymerization **690256-34-9DP**, polymerization **690256-35-0DP**, polymerization
RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)
(biosensor preparation procedure by protein immobilization on **pyrrole**-based polymer)

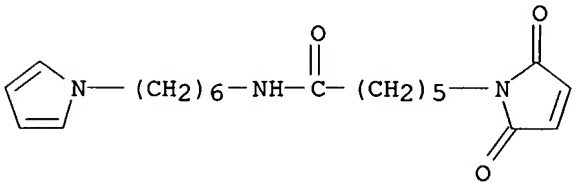
RN 690256-33-8 CAPLUS

CN 1H-Pyrrole-1-hexanamide, 2,5-dihydro-2,5-dioxo-N-[2-(1H-pyrrol-1-yl)ethyl]- (9CI) (CA INDEX NAME)



RN 690256-34-9 CAPLUS

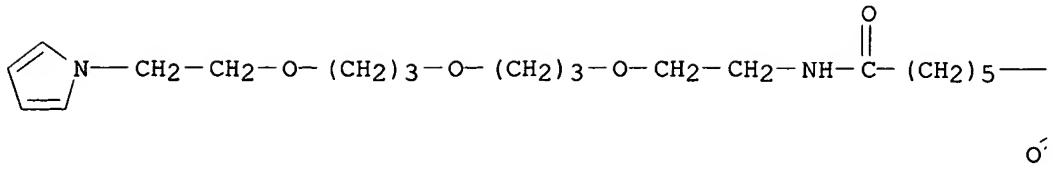
CN 1H-Pyrrole-1-hexanamide, 2,5-dihydro-2,5-dioxo-N-[6-(1H-pyrrol-1-yl)hexyl]- (9CI) (CA INDEX NAME)



RN 690256-35-0 CAPLUS

CN 1H-Pyrrole-1-hexanamide, 2,5-dihydro-2,5-dioxo-N-[2-[3-[3-[2-(1H-pyrrol-1-yl)ethoxy]propoxy]propoxy]ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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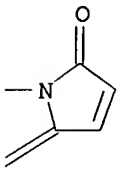


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:851403 CAPLUS
DOCUMENT NUMBER: 136:1626
TITLE: Labelling of vectors for DNA delivery with non-covalently bound polyamides carrying an affinity label for a target cell type
INVENTOR(S): Pessi, Antonello; Fattori, Daniela; Ingallinella, Paolo; Bianchi, Elisabetta; Kinzel, Olaf
PATENT ASSIGNEE(S): Istituto di Ricerche di Biologia Molecolare P. Angeletti, S.p.A., Italy
SOURCE: PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2001088160	A2	20011122	WO 2001-IB980		20010511
WO 2001088160	A3	20020725			
W: AU, CA, JP, US					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR					
CA 2408885	AA	20011122	CA 2001-2408885		20010511
EP 1290198	A2	20030312	EP 2001-932034		20010511
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR					
US 2003207400	A1	20031106	US 2003-276734		20030512
PRIORITY APPLN. INFO.:			GB 2000-11938	A	20000517
			WO 2001-IB980	W	20010511

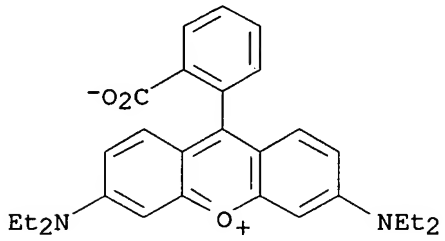
AB The present invention pertains to novel products suitable for use as gene delivery systems in which nucleic acid is linked to a ligand in order to facilitate delivery of the nucleic acid to a target cell or sub-cellular compartment via uptake of the ligand. More particularly, the present invention pertains to vectors comprising: (a) a double stranded DNA (dsDNA) having at least one target sequence; and, (b) a chimeric mol. comprising: (i) a sequence specific polyamide (SSP) moiety bound non-covalently to said target sequence; and, (ii) a ligand moiety linked

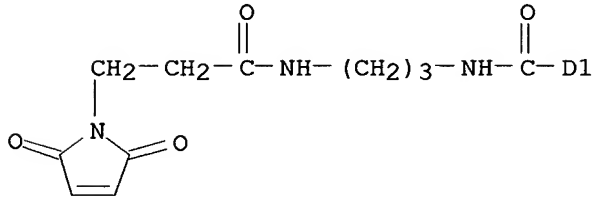
covalently to said sequence specific polyamide. The polyamide may be a peptide, but not necessarily. The present invention also pertains to compns. comprising such chimeric mols. and vectors; methods for making such chimeric mols. and vectors; and methods of using such chimeric mols. and vectors, e.g., to deliver nucleic acid vectors to cells or sub-cellular compartments. Synthesis of polyamides labeled with dyes or polysaccharide ligand groups is described.

IT **375843-01-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reactions of, in labeling of polyamides; labeling of vectors for DNA delivery with non-covalently bound polyamides carrying affinity label for target cell type)

RN 375843-01-9 CAPLUS

CN Xanthylium, 9-[2-carboxy-4(or 5)-[[[3-[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]amino]propyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, inner salt (9CI) (CA INDEX NAME)



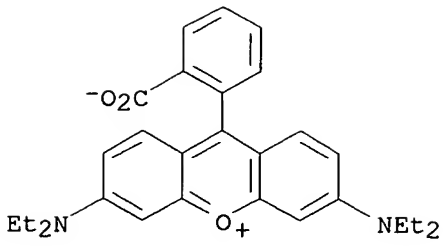


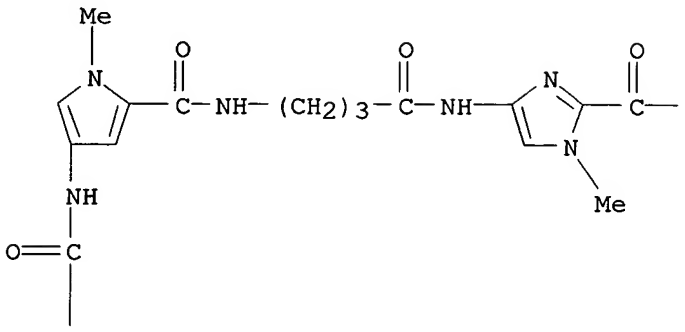
IT **375843-02-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reactions of; labeling of vectors for DNA delivery with non-covalently bound polyamides carrying affinity label for target cell type)

RN 375843-02-0 CAPLUS

CN Xanthylium, 9-[2-carboxy-4(or 5)-[[[3-[[3-[3-[[7-methyl-16-[1-methyl-4-[[[1-methyl-4-[[3-[[[1-methyl-4-[[[1-methyl-4-[[4-[[[1-methyl-4-[[[1-methyl-4-[[3-[[[1-methyl-4-[[(1-methyl-1H-imidazol-2-yl)carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-oxopropyl]amino]-1H-imidazol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-oxobutyl]amino]-1H-imidazol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1-oxopropyl]amino]-1H-imidazol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]-2,12,16-trioxo-3,7,11,15-tetraazahexadec-1-yl]thio]-2,5-dioxo-1-pyrrolidinyl]-1-oxopropyl]amino]propyl]amino]carbonyl]phenyl]-3,6-bis(diethylamino)-, inner salt (9CI) (CA INDEX NAME)

PAGE 1-A





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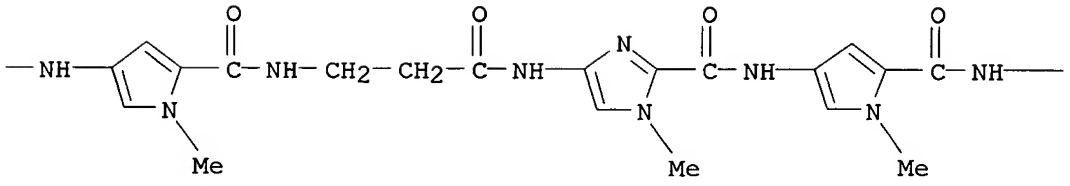
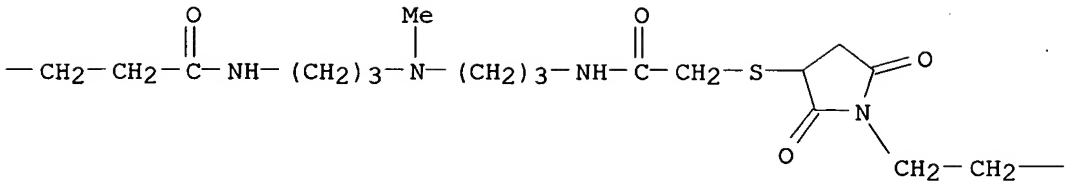
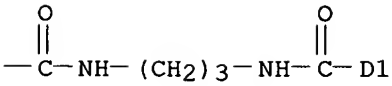
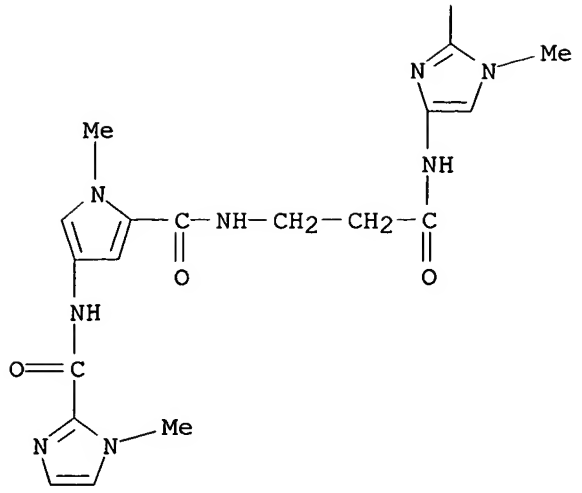








L5 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:34858 CAPLUS
DOCUMENT NUMBER: 132:93221
TITLE: Preparation of naphthalimidobenzamide derivatives as antitumor agents
INVENTOR(S): Noguchi, Kazuharu; Wakida, Motoji; Suzuki, Kenji; Yamada, Yuji; Asao, Tetsuji
PATENT ASSIGNEE(S): Taiho Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 129 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2000001672	A1	20000113	WO 1999-JP3574		19990702
W: AU, CA, JP, KR, US					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
CA 2300069	AA	20000113	CA 1999-2300069		19990702
AU 9943963	A1	20000124	AU 1999-43963		19990702
AU 727591	B2	20001214			
EP 1020446	A1	20000719	EP 1999-926895		19990702
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 3357662	B2	20021216	JP 2000-558077		19990702
US 6300331	B1	20011009	US 2000-508044		20000303
PRIORITY APPLN. INFO.:			JP 1998-189078	A	19980703
			WO 1999-JP3574	W	19990702

OTHER SOURCE(S): MARPAT 132:93221
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

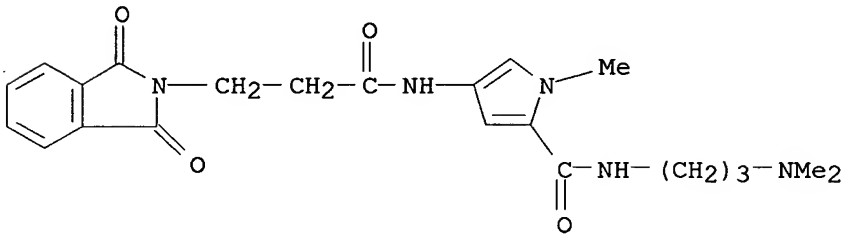
AB 2-(3-Carbamoylphenyl)-1H-benz[de]isoquinoline-1,3(2H)-dione derivs. represented by general formula (I) or salts thereof (wherein R1 is

hydrogen,NO2, OH, NH2, halo, cyano, CO2H, CONH2, ureido, alkyl, trihaloalkyl, alkoxy, etc.; Y is hydrogen or -CON(R4)-A2-X2; R2 and R4 are each independently hydrogen or alkyl; A1 and A2 are each independently linear or branched alkylene which may be interrupted by N(R3), O, S, CONH, NHCO, S(O), or SO2 (wherein R3 is hydrogen or the like); X1 is optionally substituted aryl, heteroaryl, aryldicarbonylimino, heteroaryldicarbonylimino, arylamino, heteroarylamino, arylcarbonylamino, etc.; and X2 is H, optionally substituted aryl, heterocyclyl, aryldicarbonylimino, heteroaryldicarbonylimino, arylamino, heteroarylamino, arylcarbamoyl, etc.; m = 1-3), which exhibit high affinity for DNA, are prepared Thus, a suspension of 711 mg 1-[N-[2-[(2-aminoethyl)amino]ethyl]carbamoyl]-3-(3-nitro-1,8-naphthalimido)-5-[N-(2-piperidinoethyl)carbamoyl]benzene hydrochloride, 0.5 mL Et3N, and 243 mg 3-nitro-1,8-naphthalic anhydride in 4 mL DMF was stirred at 60° for 30 min to give 72.2% title compound (II.HCl). II.HCl in vivo inhibited the proliferation of human melanoma LOX, human pancreatic cancer PAN, human breast cancer MX1, and human stomach cancer AZ521 cells transplanted s.c. in nude mice by 96.2, 59.8, 71.8, and 79.5%, resp.

IT **254452-37-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of naphthalimidobenzamide derivs. as antitumor agents)

RN 254452-37-4 CAPLUS

CN 2H-Isoindole-2-propanamide, N-[5-[[[3-(dimethylamino)propyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1,3-dihydro-1,3-dioxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:352830 CAPLUS

DOCUMENT NUMBER: 129:27933

TITLE: Aryl and heteroaryl substituted fused **pyrrole** antiinflammatory agents

INVENTOR(S): Zablocki, Jeffery A.; Tarlton, Eugene, Jr.; Rizzi, James P.; Mantlo, Nathan B.

PATENT ASSIGNEE(S): Amgen Inc., USA; Zablocki, Jeffery A.; Tarlton, Eugene, Jr.; Rizzi, James P.; Mantlo, Nathan B.

SOURCE: PCT Int. Appl., 258 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9822457	A1	19980528	WO 1997-US21344	19971118

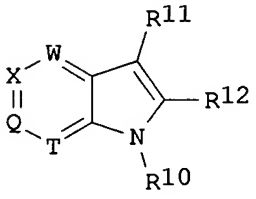
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ,

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG,
US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
GN, ML, MR, NE, SN, TD, TG

CA 2271767	AA	19980528	CA 1997-2271767	19971118
AU 9852659	A1	19980610	AU 1998-52659	19971118
AU 734841	B2	20010621		
EP 948495	A1	19991013	EP 1997-947617	19971118
EP 948495	B1	20040414		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CN 1246856	A	20000308	CN 1997-181372	19971118
JP 2001506980	T2	20010529	JP 1998-523914	19971118
AT 264318	E	20040415	AT 1997-947617	19971118
PT 948495	T	20040831	PT 1997-947617	19971118
ES 2215242	T3	20041001	ES 1997-947617	19971118
MX 9904598	A	20000228	MX 1999-4598	19990518
KR 2000057137	A	20000915	KR 1999-704405	19990519
US 6180643	B1	20010130	US 1999-269600	19990608
US 6440973	B1	20020827	US 2000-644102	20000823
US 2003096819	A1	20030522	US 2002-175182	20020618
US 6605634	B2	20030812		

PRIORITY APPLN. INFO.:	US 1996-31207P	P 19961119
	WO 1997-US21344	W 19971118
	US 1999-269600	A3 19990608
	US 2000-644102	A3 20000823

OTHER SOURCE(S): MARPAT 129:27933
GI



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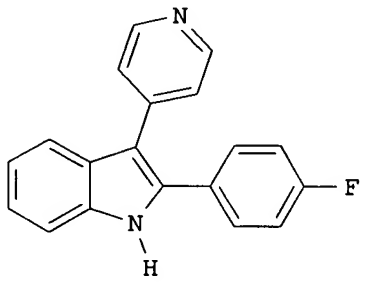


II

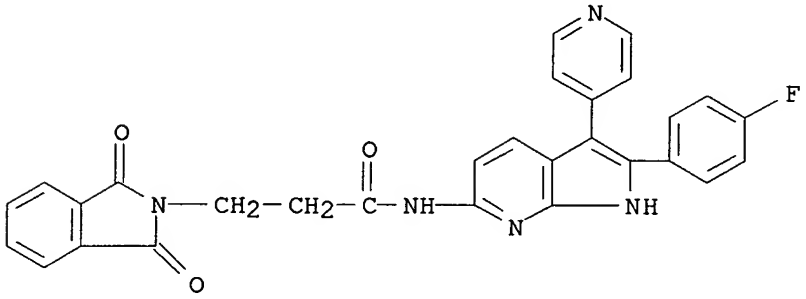
AB The invention comprises a new class of novel aryl- and heteroaryl-substituted fused **pyrrole** compds. I [W, X, Q, T = N, CH, CR1-4; R1-4 = -Z-Y with provisos; Z = bond, alk(ane/ene/yne)diyl, heterocyclediyl, (hetero)arylene; Y = H (when Z ≠ bond), halo, cyano, NO2, various acyl, (un)substituted OH, SH, or NH2; R10 = H, (un)substituted alk(en/yn)yl, various acyl or sulfonyl groups; R11, R12 = (un)substituted (hetero)aryl]. The compds. are useful for the prophylaxis and treatment of diseases or conditions mediated by TNF-α, IL-1β, IL-6 and/or IL-8, and other maladies, such as pain and diabetes. In particular, the compds. are useful for prophylaxis and treatment of inflammatory diseases or conditions. The invention also comprises pharmaceutical compns., methods of prophylaxis and treatment, use of compds. and compns., and intermediates and preparatory processes. For instance, amidation of 4-(2-aminobenzoyl)pyridine with 4-fluorobenzoyl chloride, and cyclization of the resultant keto amide using low-valent Ti from K/graphite/TiCl3, gave title compound II. This compound inhibited cyclooxygenase in vitro with an IC50 of ≤ 5 μM.

IT **208104-51-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aryl- and heteroaryl-substituted, fused **pyrrole** antiinflammatory agents)

RN 208104-51-2 CAPLUS

CN 2H-Isoindole-2-propanamide, N-[2-(4-fluorophenyl)-3-(4-pyridinyl)-1H-pyrrolo[2,3-b]pyridin-6-yl]-1,3-dihydro-1,3-dioxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:805029 CAPLUS

DOCUMENT NUMBER: 128:115156

TITLE: Moenomycin A: new chemistry that allows to attach the antibiotic to reporter groups, solid supports, and proteins

AUTHOR(S): Kempin, Uwe; Hennig, Lothar; Knoll, Dietmar; Welzel, Peter; Muller, Dietrich; Markus, Astrid; Van Heijenoort, Jean

CORPORATE SOURCE: Institut fur Organische Chemie der Universitat Leipzig, Leipzig, D-04103, Germany

SOURCE: Tetrahedron (1997), 53(52), 17669-17690
CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 128:115156

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Moenomycin A (I), on reaction with the diazonium salt derived from bifunctional (protected) II, yields the coupling product III (R1 = 2-pyridylthio) which on reduction is converted into the moenomycin thiol derivative III (R1 = H). Thiol III (R1 = H) has been used to selectively prepare dansyl and biotin adducts. This work was performed with the aim to use moenomycin as a tool for studies of the transglycosylation step in peptidoglycan biosynthesis.

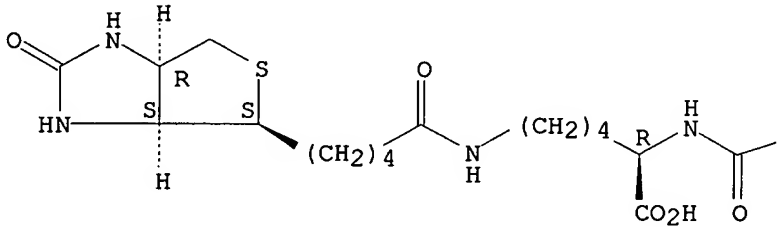
IT **201666-67-3P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of moenomycin thiol derivative for attachment to reporter groups,
solid supports, and proteins)

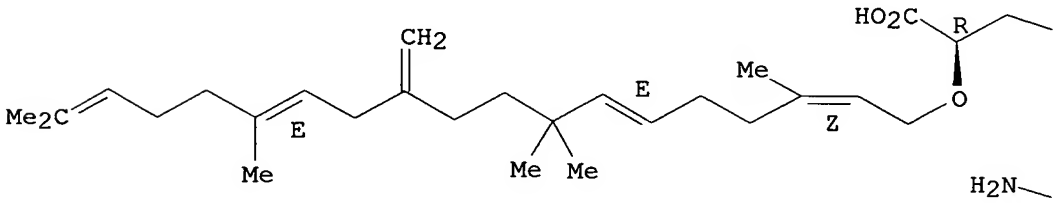
RN 201666-67-3 CAPLUS

CN α-D-Glucopyranuronamide, O-(5R)-5-C-[1-[3-[[[2-[[1-[3-[[(1R)-1-carboxy-5-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]pentyl]amino]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]thio]ethyl]amino]carbonyl]-4-nitrophenyl]-3-(3-carboxy-1-oxopropyl)-1H-1,2,4-triazol-5-yl]-α-L-arabinopyranosyl-(1→4)-O-2-(acetylamino)-2,6-dideoxy-β-D-glucopyranosyl-(1→4)-O-[β-D-glucopyranosyl-(1→6)]-O-2-(acetylamino)-2-deoxy-β-D-glucopyranosyl-(1→2)-4-C-methyl-, 3-carbamate 1-[(2R)-2-carboxy-2-[[(2Z,6E,13E)-3,8,8,14,18-pentamethyl-11-methylene-2,6,13,17-nonadecatetraenyl]oxy]ethyl hydrogen phosphate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A





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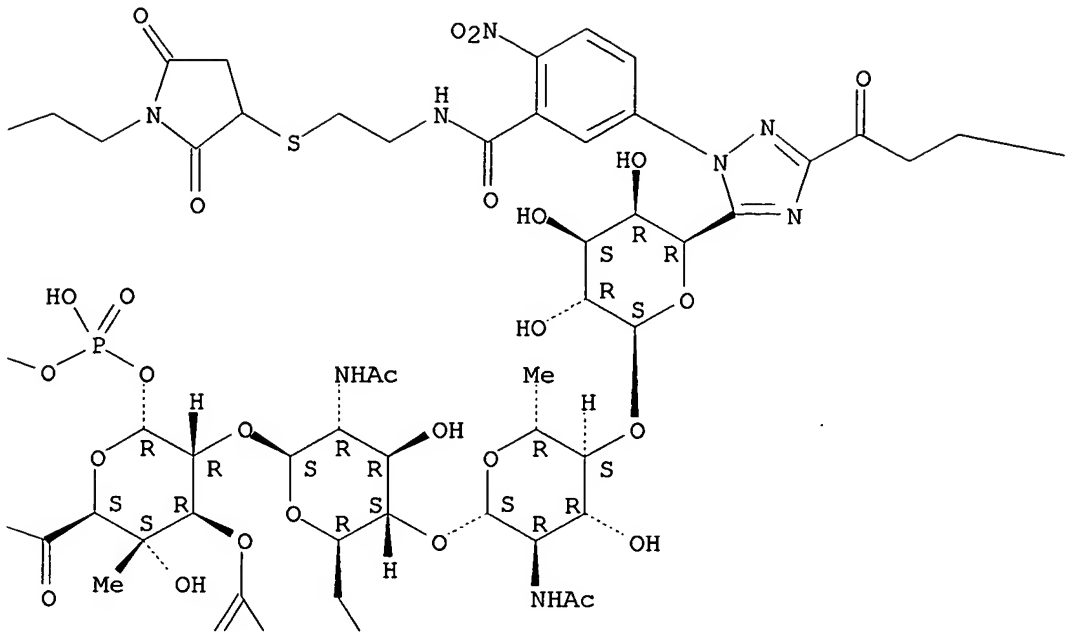

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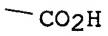

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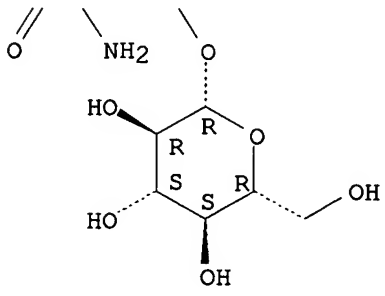
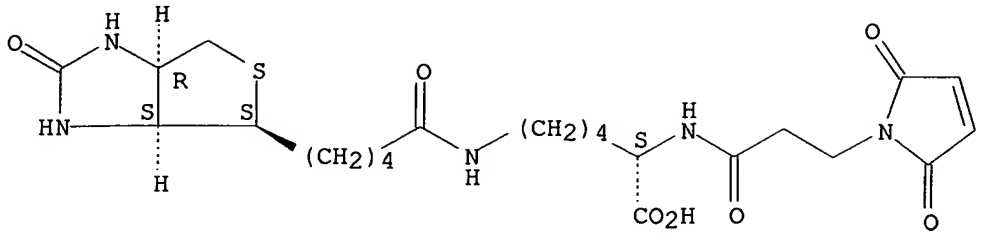


IT **102849-12-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of moenomycin thiol derivative for attachment to reporter groups,
solid supports, and proteins)
RN 102849-12-7 CAPLUS
CN L-Lysine, N2-[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]-N6-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:400827 CAPLUS
DOCUMENT NUMBER: 122:239411
TITLE: Towards synthetic-porphyrin/monoclonal antibody conjugates
AUTHOR(S): Milgrom, Lionel R.; O'Neill, Faye
CORPORATE SOURCE: Dep. Chem., Brunel Univ., Uxbridge/Middlesex, UB8 3PH, UK
SOURCE: Tetrahedron (1995), 51(7), 2137-44
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 122:239411

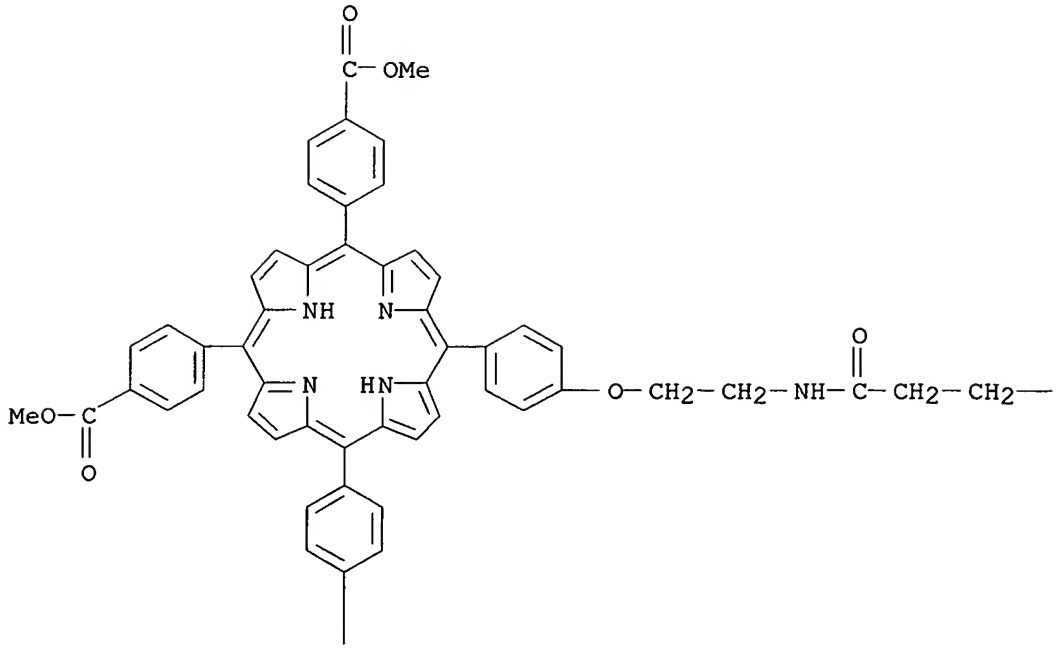
AB The synthesis of an unsym. meso-aminoalkoxyphenyl-substituted porphyrin, and its conjugation to a monoclonal antibody (mAb), are described.

IT **162378-16-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of porphyrin-monoclonal antibody conjugate)

RN 162378-16-7 CAPLUS

CN Benzoic acid, 4,4',4''-[20-[4-[2-[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]amino]ethoxy]phenyl]-21H,23H-porphin-5,10,15-triyl]tris-, trimethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



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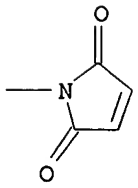

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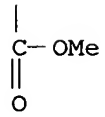
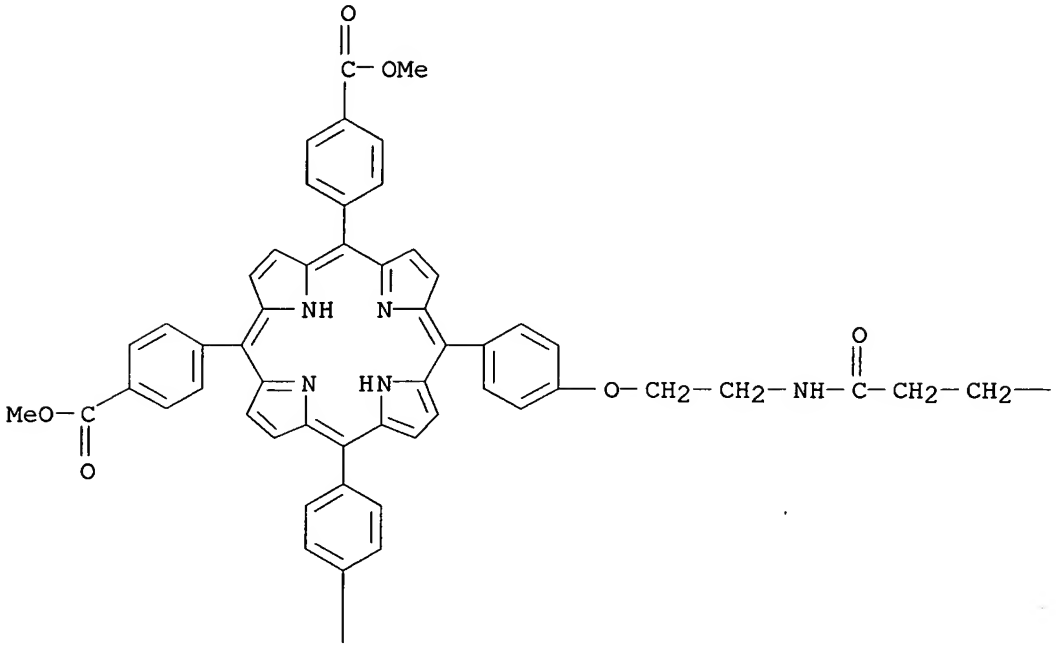


IT **162378-16-7DP**, thiolated monoclonal antibody conjugate
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of porphyrin-monoclonal antibody conjugate)
RN 162378-16-7 CAPLUS
CN Benzoic acid, 4,4',4''-[20-[4-[2-[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-

yl)-1-oxopropyl]amino]ethoxy]phenyl]-21H,23H-porphin-5,10,15-triyl]tris-, trimethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



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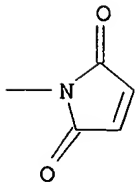

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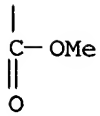
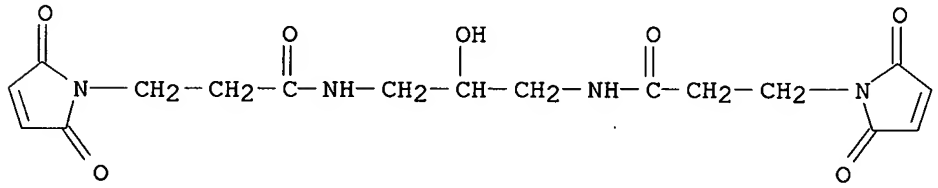


L5 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:490598 CAPLUS
DOCUMENT NUMBER: 119:90598
TITLE: Metal porphyrin chemiluminescence reaction and application to immunoassay
AUTHOR(S): Motsenbocker, M.; Ichimori, Y.; Kondo, K.
CORPORATE SOURCE: Pharm. Res. Div., Takeda Chem. Ind. Ltd., Osaka, 532, Japan
SOURCE: Analytical Chemistry (1993), 65(4), 397-402
CODEN: ANCHAM; ISSN: 0003-2700
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A new luminol chemiluminescence chemical system is described which does not require preparation or use of an oxidizer such as hydrogen peroxide. In the reaction a metal porphyrin catalyzes luminol chemiluminescence in a high pH solution A comparison of porphyrin catalysts showed that a metal atom is needed in the porphyrin, manganese works better than iron, and substitution of strongly electron withdrawing groups at the para positions of the tetrapyrrole porphine with no substitution of the **pyrrole** rings gives the best activity. The metal porphyrin chemiluminescence system is enhanced by the presence of unsatd. long-chain fatty acid in the reaction solution Sensitivity of detection of Mn meso-tetrakis-(4-sulfonatophenyl)porphine was 120 amol. Coupling reactions of a carboxyphenyl derivative to antibodies were optimized, and a detection limit of 68 amol was obtained for a metal porphyrin antibody conjugate. An α-fetoprotein immunoassay developed using the chemiluminescence reaction had a detection limit of 20 pg (0.2 fmol). Good correlation was found (R = 0.99) between immunoassay results and α-fetoprotein in 32 human plasma samples. Because the reaction solution needed for Me porphyrin chemiluminescence is very simple (luminol in NaOH/water) and has good stability, this chemiluminescence detection system may have application to automated assays.

IT **115388-98-2DP**, reaction products with proteins
RL: PREP (Preparation)
(preparation of, for chemiluminescence immunoassays)
RN 115388-98-2 CAPLUS
CN 1H-Pyrrole-1-propanamide, N,N'-(2-hydroxy-1,3-propanediyl)bis[2,5-dihydro-2,5-dioxo- (9CI) (CA INDEX NAME)



L5 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:183399 CAPLUS
DOCUMENT NUMBER: 118:183399
TITLE: Trifunctional compounds having specificity for multi-drug-resistant (MDR) cells
INVENTOR(S): Grauer, Lana S.; Ahlem, Clarence N.
PATENT ASSIGNEE(S): Hybritech Inc., USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

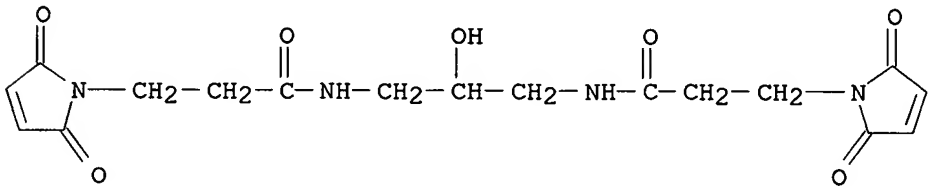
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9302105	A1	19930204	WO 1992-US6043	19920717
W: AU, CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
CA 2113578	AA	19930204	CA 1992-2113578	19920717
AU 9224006	A1	19930223	AU 1992-24006	19920717
EP 596011	A1	19940511	EP 1992-916746	19920717
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
PRIORITY APPLN. INFO.:			US 1991-732969 A	19910719
			WO 1992-US6043 A	19920717

AB Trifunctional compds. are disclosed which have specific reactivity with P-glycoproteins associated with MDR tumor cells. The compds. can optionally be specific for diagnostic and/or therapeutic agents. Also provided are methods for diagnosing and treating patients with tumors expressing P-glycoproteins associated with MDR cells. The trifunctional compds. of the invention are L(X1)(X2)(X3) (L = crosslinking agent; X1-X3 = antibody fragment Fab'-like moieties, ≥1 of which has specific reactivity with a P-glycoprotein associated with a MDR cell). Thus, a monoclonal antibody (LS2H241) was produced against SH-SY5Y/VCR human neuroblastoma cells, and F(ab)'2 fragments were produced from the monoclonal antibody. A trifunctional compound was prepared which contained 2 of the above F(ab)'2 fragments and 1 F(Ab)'2 fragment derived from a mouse-human chimeric antibody with specificity for the In-EDTA chelate; the crosslinking agent used was N,N'-bis(3-maleimidopropionyl)-2-hydroxy-1,3-propanediamine. The prepared trifunctional compound bound to membranes of P-glycoprotein-expressing MDR cell line CEM/VLB100, while binding minimally to membranes of drug-sensitive cell line CCRF-CEM (which contain very low levels of P-glycoprotein). Preincubation of drug-resistant MC-IXC/VCR human neuroepithelioma cells with the trifunctional compound prior to incubation with actinomycin D resulted in a .apprx.4-fold increase in intracellular drug concentration over control cells. Biodistribution of the trifunctional compound and an 111In chelate is also reported.

IT **115388-98-2**
RL: BIOL (Biological study)
(as crosslinking agent, in preparation of trifunctional compound with antibody
fragment specific for P-glycoprotein)

RN 115388-98-2 CAPLUS

CN 1H-Pyrrole-1-propanamide, N,N'-(2-hydroxy-1,3-propanediyl)bis[2,5-dihydro-2,5-dioxo- (9CI) (CA INDEX NAME)



L5 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	1991:651668 CAPLUS
DOCUMENT NUMBER:	115:251668
TITLE:	Antibody-labeled liposomes for diagnosis and therapy
INVENTOR(S):	Langhals, Heinz; Schott, Herbert; Schwendener, Reto Albert
PATENT ASSIGNEE(S):	Germany
SOURCE:	Ger. Offen., 19 pp. CODEN: GWXXBX
DOCUMENT TYPE:	Patent

LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

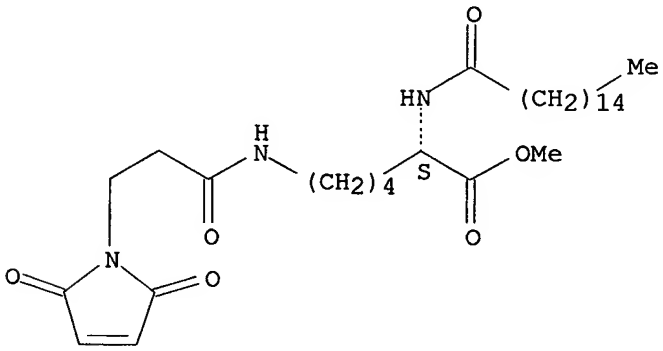
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3935257	A1	19910425	DE 1989-3935257	19891023

PRIORITY APPLN. INFO.: DE 1989-3935257 19891023
OTHER SOURCE(S): MARPAT 115:251668

AB Antibodies are coupled to labeled liposomes with N-succinimidyl-2-(2-pyridyldithio)propionate or N-succinimidyl-S-acetylthioacetate (SATA), preferably SATA. The liposomes are formed from soybean phosphatidylcholines, cholesterol, maleimide derivs., and α-tocopherol at a ratio of (0.2-3):(0.05-0.5):(0.005-0.1):(0.001-0.1). The antibodies are coupled through the SH group of the derivatized antibody and the maleimido group of the liposome. Preferred labels are perylene dyes, especially N,N'-bis(1-hexylheptyl)-3,4:9,10-perylenebis(dicarboxamide) (BHPD). The preferred antibodies are monoclonal antibodies to histocompatibility antigen H-2Kb or melanoma antigen. The liposomes are useful for therapy and diagnosis, e.g. AIDS diagnosis. The antibodies may also be immobilized through biotin-avidin complexes. Liposomes were prepared from phosphatidylcholine, cholesterol, D,L-α-tocopherol, N4-oleylcytosine arabinoside, and N6-(6-maleimidocaproyl-N2-palmitoyl)-L-lysine Me ester (preparation described), which were then coupled to SATA-derivatized monoclonal antibodies.

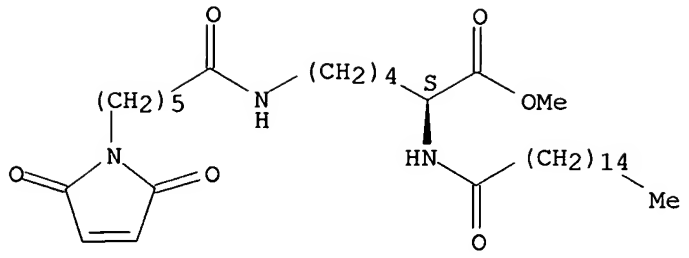
IT **130252-72-1**
RL: ANST (Analytical study)
(liposomes containing, antibodies coupled to, succinimidyl coupling agents for)
RN 130252-72-1 CAPLUS
CN L-Lysine, N6-[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxopropyl]-N2-(1-oxohexadecyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **130278-12-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for antibody coupling to liposomes, succinimidyl coupling agents for)
RN 130278-12-5 CAPLUS
CN L-Lysine, N6-[6-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)-1-oxohexyl]-N2-(1-oxohexadecyl)-, methyl ester (9CI) (CA INDEX NAME)

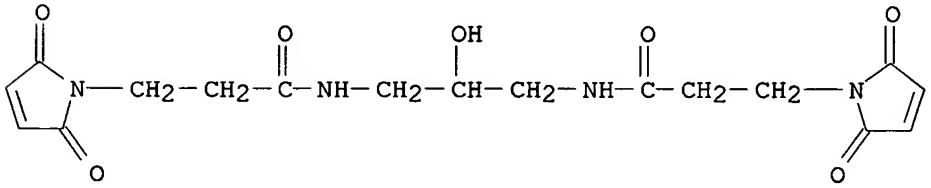
Absolute stereochemistry.



L5 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:467721 CAPLUS
DOCUMENT NUMBER: 115:67721
TITLE: Specific interchain crosslinking of antibodies using bismaleimides. Repression of ligand leakage in immunoaffinity chromatography
AUTHOR(S): Goldberg, Michel; Knudsen, Kaja L.; Platt, David; Kohen, Fortune; Bayer, Edward A.; Wilchek, Meir
CORPORATE SOURCE: Dep. Biophys., Weizmann Inst. Sci., Rehovot, Israel
SOURCE: Bioconjugate Chemistry (1991), 2(4), 275-80
CODEN: BCCHES; ISSN: 1043-1802
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To overcome the problem of leaching of antibody (or portions thereof) from immunoaffinity resin during elution of the target antigen (e.g., proteins) by combined use of reducing (i.e., thiols) and chaotropic (e.g., detergents and denaturants) agents, the 4 antibody chains were crosslinked at their sites of disulfide interlinkage, thus producing a single antibody chain. To accomplish this, interchain disulfide bonds were reduced, and the resultant thiol groups were crosslinked by using bifunctional SH-specific reagents (particularly bismaleimides. Crosslinking of up to 95% of the available SH groups produced was achieved with concomitant retention of antigen-binding activity. The crosslinked antibody was immobilized onto CNBr-activated Sepharose, and the resultant column was substantially more stable to harsh elution conditions than similar columns that contain the uncrosslinked antibody.

IT **115388-98-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(crosslinking by, of antibody chains for immunoaffinity chromatog.)
RN 115388-98-2 CAPLUS
CN 1H-Pyrrole-1-propanamide, N,N'-(2-hydroxy-1,3-propanediyl)bis[2,5-dihydro-2,5-dioxo- (9CI) (CA INDEX NAME)



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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	65.68	227.22

Choice (Y/n):
Switching to the Registry File...
Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 10:35:46 ON 07 DEC 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 DEC 2005 HIGHEST RN 869462-96-4
DICTIONARY FILE UPDATES: 6 DEC 2005 HIGHEST RN 869462-96-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

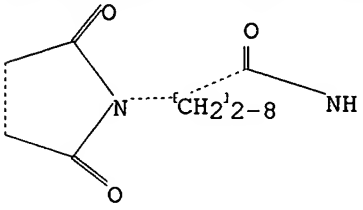
```
**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,    *
* effective March 20, 2005.  A new display format, IDERL, is now     *
* available and contains the CA role and document type information.  *
*                                                                    *
**********************************************************************
```

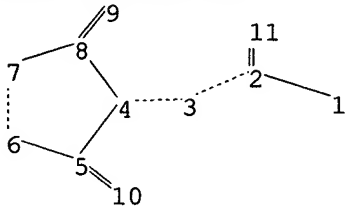
Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\10533950b.str





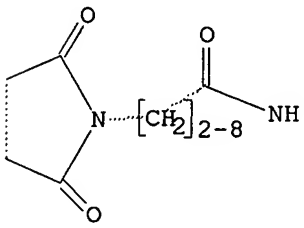
chain nodes :
1 2 3 9 10 11

ring nodes :
4 5 6 7 8
chain bonds :
1-2 2-3 2-11 3-4 5-10 8-9
ring bonds :
4-5 4-8 5-6 6-7 7-8
exact/norm bonds :
1-2 2-3 2-11 3-4 4-5 4-8 5-6 5-10 6-7 7-8 8-9

Match level :
1:CLASS 2:CLASS 3:CLASS 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:CLASS
10:CLASS 11:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 10:36:04 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 791 TO ITERATE

100.0% PROCESSED 791 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 14133 TO 17507
PROJECTED ANSWERS: 3313 TO 5047

L2 50 SEA SSS SAM L1

=> s l2 sss full
FULL SEARCH INITIATED 10:36:17 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 16380 TO ITERATE

100.0% PROCESSED 16380 ITERATIONS 4322 ANSWERS
SEARCH TIME: 00.00.01

L3 4322 SEA SSS FUL L1

=> FIL CAPLUS
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION